LPDES PERMIT NO. LA0003565, AI No. 2140

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. **Company/Facility Name:** International Paper Company
Pineville Mill
Post Office Box 5870
Pineville, Louisiana 71361-5870

II. **Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

III. **Prepared By:** Sonja Loyd
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Date Prepared: March 19, 2007

IV. **Permit Action/Status:**

A. Reason For Permit Action:

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

* In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401 and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901, and 4903.

B. LPDES permit: Effective date - May 1, 2002
Major Modification date - January 1, 2003
Expiration date - April 30, 2007

C. Date Application Received: The permit renewal application was received on October 30, 2006. Supplemental information needed to complete the permitting process was received on November 17, 2006, April 13, 2007, and April 24, 2007.

V. Facility Information:

A. Location - 300 Williams Lake Road in Pineville, Rapides Parish (Latitude 31°17'39", Longitude 92°21'04")

B. Applicant Activity - According to the application, International Paper Company, Pineville Mill, is an integrated unbleached kraft pulp and paperboard mill.

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401 and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline	Reference
Pulp, Paper, and Paperboard (Unbleached Kraft Subcategory)	40 CFR 430, Subpart C

Other sources of technology-based limits:
Current LPDES permit (effective May 1, 2002)
Best Professional Judgement

D. Fee Rate -
1. Fee Rating Facility Type: Major
2. Complexity Type: III
3. Wastewater Type: II
4. SIC codes: 2631, 2621, and 2611

E. Continuous Facility Effluent Flow - 9.445 MGD (30-Day Maximum)

VI. Receiving Waters: Red River

1. TSS (15%), mg/L: 34
2. Average Hardness, mg/L $CaCO_3$: 148.3
3. Critical Flow, cfs: 1,740
4. Mixing Zone Fraction: 0.333
5. Harmonic Mean Flow, cfs: 9,815
6. River Basin: Red River, Subsegment No. 100201
7. Designated Uses:
   The designated uses are primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply.

Information based on the following: LAC 33:IX Chapter 11 and memorandum from Brian Baker to Sonja Loyd dated March 28, 2007.

Hardness and 15% TSS data were taken from ambient monitoring site No. 1235 on the Red River near Boyce, Louisiana. The critical and harmonic mean flows were obtained from the USGS flow monitoring station on the Red River in Alexandria, Louisiana.

VII. Outfall Information:

Outfall 001

A. Type of wastewater - Treated process wastewater, treated sanitary wastewater, stormwater runoff, and miscellaneous wastewaters (comprised of wet wood storage overflow, hydrostatic test wastewater, air conditioner condensate, steam trap condensate, fire systems test water, eye wash and safety shower station water, and general facility washdown water such as facility washdown water and dust control water)

B. Location - At the point of discharge from Beaver Lake prior to combining with other waters (Latitude 31°16'25", Longitude 92°23'33")

C. Treatment - Treatment of process wastewater, sanitary wastewater, and stormwater consist of clarification, aeration stabilization basin (ASB), and polishing pond

D. Flow - Continuous, 9.445 MGD (30-Day Maximum)

E. Receiving waters - Red River

F. Basin and segment - Red River Basin, Subsegment No. 100201

VIII. Current Effluent Limits:

See Appendix D - LPDES permit limits

IX. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current LPDES Permit:

A. The description of wastestreams has been modified to include miscellaneous wastewaters (comprised of wet wood storage overflow, hydrostatic test wastewater, air conditioner condensate, steam trap condensate, fire systems test water, eye wash and safety shower

station water, and general facility washdown water such as facility washdown water and dust control water).

B. The daily maximum and monthly average technology-based mass limits for BOD_5 and TSS have been revised based on the permittee's current production rate as reported in the 2006 application.

C. The permittee's request for a monitoring frequency reduction from three times per week to once per week for BOD_5 and TSS has been granted in accordance with the Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies, April 1996. See Appendix F for the basis of the proposed monitoring frequency reduction.

D. The Whole Effluent Toxicity (WET) testing dilution series for Freshwater Acute Biomonitoring at Outfall 001 was changed to reflect 10%, 14%, 18%, 25%, and 33% (with 25% defined as the critical dilution) with a monitoring frequency of once per quarter. This revision is based on recommendations from the Technical Support Section in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. The proposed biomonitoring requirements were developed in accordance with EPA Region 6 policy and biomonitoring protocol which is being established in all major permits as a part of the permit reissuance process. See Appendix C for Biomonitoring Recommendation.

E. Updated Part II conditions for stormwater discharges associated with industrial activities have been established in the draft permit.

F. The provision in the Part II conditions that required submittal of DMRs to the Northeast Regional Office has been removed from the permit. All DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are scanned into the Electronic Document Management System which is accessible to all DEQ personnel.

X. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

B. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

C. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

1. Outfall 001 - Treated process wastewater, treated sanitary wastewater, stormwater runoff, and miscellaneous wastewaters (comprised of wet wood storage overflow, hydrostatic test wastewater, air conditioner condensate, steam trap condensate, fire systems test water, eye wash and safety shower station water, and general facility washdown water such as facility washdown water and dust control water)

Flow (MDG) - Report, monthly average and daily maximum
BOD_5 (*1)
TSS (*1)
pH (s.u.) - 6.0 - 9.0

This permittee is subject to Best Conventional Pollutant Control Technology (BCT) effluent limitation guidelines listed below:

Guideline	Reference
Pulp, Paper, and Paperboard (Unbleached Kraft Subcategory)	40 CFR 430, Subpart C (430.33 BCT)

(*1) Calculations and basis of the technology-based mass limits for BOD_5 and TSS are found in Appendix A-1. See below for site-specific considerations.

Site-Specific Considerations

The permittee is subject to the Best Available Technology Economically Achievable (BAT) for the control of Pentachlorophenol or Trichlorophenol. However, the permittee certified that chlorophenolic-containing biocides are not used at the facility. Therefore, effluent limitations and

monitoring requirements for Pentachlorophenol and Trichlorophenol have not been established in this draft permit.

Storm Water Pollution Prevention Plan (SWP3) Requirement

In accordance with LAC 33:IX.2707.I.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type of plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

D. WATER QUALITY-BASED EFFLUENT LIMITATIONS

The analytical results from the permittee's 2006 application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing discharge was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendices B-1 and B-2.

The following pollutants received water quality based effluent limits:

None

TMDL Waterbody Status

Subsegment No. 100201 of the Red River Basin is not listed as being impaired on the 2004 Final Integrated 303(d) List.

A reopener clause has been established in Part II of the draft permit to allow for more stringent effluent limitations and requirements as imposed by a future TMDL.

E. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols. See Appendix C for the Biomonitoring Recommendation.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS	FREQUENCY
Acute static renewal 48-hour definitive toxicity test using Daphnia pulex	1/quarter
Acute static renewal 48-hour definitive toxicity test using fathead minnow (Pimephales promelas)	1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental

Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 10%, 14%, 18%, 25%, and 33%. The low-flow effluent concentration (critical dilution) is defined as 25% effluent.

F. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(i)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. Outfall 001 - Treated process wastewater, treated sanitary wastewater, stormwater runoff, and miscellaneous wastewaters (comprised of wet wood storage overflow, hydrostatic test wastewater, air conditioner condensate, steam trap condensate, fire systems test water, eye wash and safety shower station water, and general facility washdown water such as facility washdown water and dust control water)

Flow shall be monitored continuously using a recorder. pH shall be monitored three times per week using a grab sample. The remaining pollutants are to be monitored once per week using a 24-hour Composite sample.

Parameter(s):
Flow
BOD_5
TSS
pH

Site-Specific Considerations

A monitoring frequency reduction for BOD_5 and TSS was granted in accordance with the Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies, April 1996. The permittee was granted this reduction because of its ability to reduce these pollutants in the discharge below the levels necessary to meet its current permit limits. See Appendix F for the basis of the proposed monitoring frequency reduction.

XI. Compliance History/DMR Review:

A. LDEQ records were reviewed for the period of March 2004 through March 2007. No enforcement actions were found.

B. A DMR review of the monitoring reports for the period of March 2004 through March 2007 revealed that there were no effluent violations.

C. The most recent inspection was performed on December 18, 2006. All areas evaluated were found to be satisfactory.

XII. "IT" Questions - Applicant's Responses

The "IT" Questions along with the permittee's responses can be found in the 2006 application. See Appendix E.

XIII. Endangered Species:

The receiving waterbody, Subsegment No. 100201 of the Red River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as a threatened and an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

XIV. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the

"Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XVI. Variances:

No requests for variances have been received by this Office.

XVII. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheetstatement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper(s) of general circulation

Office of Environmental Services Public Notice Mailing List